REMARKS

Status of the Claims

Claims 1-4 and 6-24 are pending. Claims 7-20, and 23-24 were withdrawn from further consideration as being drawn to non-elected subject matter as a result of a restriction requirement. Claim 5 was canceled without prejudice and disclaimer.

By entry of this amendment, claims 7-20, 23 and 24 have been canceled without disclaimer or prejudice. Applicants reserve the right to pursue the subject matter encompassed in the canceled claims in subsequent continuation or divisional applications.

Claims 1 and 21 have been amended by this amendment. Thus, claims 1-4, 6, 21 and 22 are currently under examination.

No new matter has been added by this amendment.

This amendment adds, changes and/or deletes claims in the instant application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claims remain under examination in the application, are presented with an appropriate defined status identifiers. See 37 C.F.R. §1.121(c).

Claims Objections

Claims 1 and 21 are objected to because they recited non-elected SEQ ID NOs.

Claims 1 and 21 have been amended so as to obviate these objections. The Examiner is respectfully requested to withdraw these objections.

Information Disclosure Statement

Applicants thank the Examiner for duly considered the references as submitted in the IDS dated April 1, 2005.

However, applicants would like to point out that the reference through which the Examiner drew a line indeed does have a publication date, which was March 2, 2005.

Rejections under 35 USC §112, first paragraph, written description

The claims are rejected under 35 USC §112, first paragraph, for allegedly being not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors,

at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse.

Claims 1 and 21 have been amended to specifically recite one SNP as represented by SEQ ID NO: 33944, which is associated with risk of developing myocardial infarction (MI).

Therefore, the rejections under 35 USC §112, first paragraph, for allegedly lack of adequate written description have been overcome. The Examiner is respectfully requested to withdraw the rejections.

Rejections under 35 USC §112, first paragraph, enablement

The claims are rejected under 35 USC §112, first paragraph, for allegedly being not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants respectfully traverse.

It is well known that the Examiner bears the initial burden to make a *prima facie* case that the claims are not enabled in the specification. As stated above, the claims have been amended such that they recite one specific SNP that is to be detected in its association with MI. In that regard, applicants have provided sufficient data analysis in the examples that the SNP at issue has been associated with myocardial infarction, as shown in the Examples section, and in the tables of the instant application.

Therefore, the rejections under 35 USC §112, first paragraph, for allegedly lack of enablement have been overcome with the claims amendment and in light of the remarks above. The Examiner is respectfully requested to withdraw the rejections.

Rejections under 35 USC §112, second paragraph, indefiniteness

The claims are rejected under 35 USC §112, second paragraph, as being allegedly indefinite. Applicants respectfully traverse.

The Examiner stated that the term "correlated" has allegedly not been clearly defined in the specification.

As shown in numerous places such as pages 7, 69, 107 of the specification, the term "correlated" has been clearly defined as to indicate a relationship between the presence of a particular SNP and the level of risks for developing MI for the individual harboring that SNP.

The examiner also stated that the term "altered risk" is not clear as it encompasses both increased risk and decreased risk.

Applicants' invention teaches that where there are two alleles at the designated SNP location if one allele (major, or, minor) turns out to be the risk allele, thereby indicating an increased risk for MI, the other allele would be the "non-risk", or "protective" allele, thereby indicating a decreased risk for MI. Thus, the term "altered risk" is clearly defined in the context of the data tables.

The examiner further alleged that the final step of claims 21 and 22 was not clearly drafted. Claim 21 has been amended to make it clear that the goal of the method and the final step agree.

Thus, by the entry of the amendments and remarks above, the rejections under 35 USC §112, second paragraph, as being allegedly indefinite, have been overcome, and should be withdrawn.

In conclusion, in light of the amendments and remarks above, Applicants submit that the present application is fully in condition for allowance. Early notice to that effect is earnestly requested.

The Examiner is invited to contact the undersigned via telephone if a phone interview would expedite the prosecution of the instant patent application.

Respectfully submitted,

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